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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/777,634	02/13/2004	Timothy Patrick Jon Perry	52493.000368	5377
21967 7590 03/30/2011 HUNTON & WILLIAMS LLP INTELLECTUAL PROPERTY DEPARTMENT 1900 K STREET, N.W. SUITE 1200 WASHINGTON, DC 20006-1109				
EXAMINER PHONGSVIRAJATI, POONSIN				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/777,634

**Applicant(s)**

PERRY ET AL.

**Examiner**

SIND PHONGSVIRAJATI

**Art Unit**

3686

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10 and 12-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10, 12-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_

## **DETAILED ACTION**

### ***Status of Claims***

1. In response to communication filed on 01/05/2011, claims 1, 10, 12, 18-19 are currently amended. Claims 11 and 20 are canceled. Claims 1-10,12-19 are currently pending.

### ***Claim Rejections - 35 USC § 101***

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

The 101 rejection to claim 18-20 are withdrawn given Applicant's amendments.

### ***Claim Rejections - 35 USC § 112 Second Paragraph***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Examiner thanks Applicant for adopting Examiner's recommendations to overcome the 112(2) rejection to claims 1-11 and thus the 112(2) rejection to claims 1-11 is withdrawn.

***Claim Rejections - 35 USC § 112, Fourth Paragraph***

1. The following is a quotation of that portion of 35 U.S.C. 112 which forms the basis for rejections made under this section in this Office action:

A claim in dependent form shall contain a reference to a claim previously set forth and then specify a further limitation of the subject matter claimed.

2. Applicant has cancel claim 20, thus the 112(4) rejection is hereby withdrawn.

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claims 1, 3-12, 14-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson et al. (US 5,235,654) in view of Scanlon (US 5,850,480).

4. As to **Claim 1**, Anderson teaches a system for routing and processing insurance related data (Anderson, Abstract and col. 8 lines 44-52), the system comprising:

- a. a raw data database configured to electronically store insurance application related documents (Anderson, col. 3 line 63 to col. 4 line 19, the Examiner takes the position that the master machine generated data structure is equivalent to the raw data database);
- b. a rules engine configured to convert the documents into at least one data element having a common format (Anderson, Fig. 4A, Fig. 7A-7E, col. 21 lines 25 to col. 22 line 13);
- c. the clean data is stored in an operational database for use in application processing (Anderson, col. 3 lines 24-33, col. 33 lines 50-66);
- d. the rules engine configured to generate an exception task if it is determined that at least one data element is not clean, the rules engine generates an exception task constituted by the rules engine determining a process that is to be performed on one data element of the at least one data element that is not clean, the exception task associated exclusively to the one data element so as to process the one data element as an individual data element (Anderson, col. 6 lines 56-63, col. 27 lines 3-65); and
- e. the rules engine receives a resolution to the exception task, upon the performance of the determined process, thereby enabling validation of the at least one data element (Anderson, col. 7 lines 2-13).

Anderson does not specifically disclose the rules engine determining whether each of the at least one data element has been fully validated as clean data. Scanlon does teach the rules engine determining whether each of the at least one data element has been fully validated as clean data (Scanlon, Figs. 3 and 7E, col. 31 lines 42-48 and col. 33 lines 16-31). It would have been obvious to one of ordinary skill in the art at the time of the invention to have included fully validating each data element as clean data for the motivation for OCR error correction (Scanlon, Abstract).

5. As to **Claim 3**, Anderson teaches the system of claim 1, further comprising: a state machine that monitors clean data in the operational database and rules engine outputs (Anderson, col. 11 lines 59-68), wherein the state machine generates workflow tasks to enable case progression through the system, the tasks based upon said clean data and rules engine outputs (Anderson, Fig. 4A), wherein the state machine receives responses to said workflow tasks (Anderson, col. 12 lines 1-11), and wherein the state machine determines case progression based upon said responses (Anderson, col. 12 lines 17-49 and Fig. 4B).

6. As to **Claim 4**, Anderson teaches the system of claim 1, further comprising: a state machine that monitors data converted by the rules engine (Anderson, col. 12 lines 54-65), wherein the state machine generates data tasks to enable data verification (Anderson, Fig. 4C), wherein the state machine receives responses to said data tasks (Anderson, Fig. 4C step 204), and wherein the state machine verifies data for

forwarding to the operational database based upon said responses (Anderson, col. 32 lines 49-67).

7. As to **Claim 5**, Anderson teaches the system of claim 1, wherein application-related documents include electronic documents and paper documents (Anderson, col. 3 lines 34-41 and col. 4 lines 13-14).

8. As to **Claim 6**, Anderson teaches the system of claim 1, wherein the documents of a first type are stored in a first raw data database and documents of a second type are stored in a second raw data database (Anderson, Fig. 1R element 35).

9. As to **Claim 7**, Anderson teaches the system of claim 1, wherein the exception task instructs a person to perform a task to resolve the exception (Anderson, Fig. 1R element 32, col. 33 lines 8-22).

10. As to **Claim 8**, Anderson teaches the system of claim 1, wherein the exception task instructs an automated process to perform a task to resolve the exception (Anderson, Fig. 1R element 32, col. 32 lines 55-67).

11. As to **Claim 9**, Anderson teaches the system of claim 1, further comprising: the rules engine determines if additional information is required to validate a data element (Anderson, col. 7 lines 5-43, col. 33 lines 8-22); and the rules engine generating an exception task to obtain the additional information (Anderson, col. 6 lines 56-63).

12. As to **Claim 12**, Anderson teaches a method for routing and processing insurance related data, the method performed by a tangibly embodied computational device, the method comprising:

- a. receiving, by the computational device, insurance application-related documents from external sources (Anderson, col. 3 lines 34-56),
- b. storing, by the computational device, the documents electronically in a raw data database (Anderson, col. 3 line 63 to col. 4 line 19, the Examiner takes the position that the master machine generated data structure is equivalent to the raw data database);
- c. converting, by a rules engine in the computational device, the documents into at least one data element having a common format (Anderson, Fig. 4A steps 602-606);
- d. storing, by the computational device, clean data in an operational database for use in application processing (Anderson, col. 3 lines 24-33);
- e. generating, by the computational device, an exception task if it is determined that at least one data element is not clean (Anderson, col. 6 lines 56-63); and
- f. receiving, by the computational device, a resolution to the exception task, thereby enabling validation of the at least one data element (Anderson, col. 7 lines 2-13).

Anderson does not specifically disclose the rules engine determining whether each of the at least one data element has been fully validated as clean data. Scanlon does teach the rules engine determining whether each of the at least one data element has been fully validated as clean data (col. 31 lines 42-48 and col. 33 lines 16-31). It



would have been obvious to one of ordinary skill in the art at the time of the invention to have included fully validating each data element as clean data for the motivation for OCR error correction (Scanlon, Abstract).

As to **Claim 14**, Anderson teaches the method of claim 12, further comprising: monitoring clean data in the operational database and rules engine outputs (Anderson, col. 11 lines 59-68), generating workflow tasks to enable case progression through the system, the tasks based upon said clean data and rules engine outputs (Anderson, Fig. 4A), receiving responses to said workflow tasks (Anderson, col. 12 lines 1-11), and determining case progression based upon said responses (Anderson, col. 12 lines 17-49 and Fig. 4B).

13. As to **Claim 15**, Anderson teaches the method of claim 12, wherein the exception task instructs a person to perform a task to resolve the exception (Anderson, Fig. 4C).

14. As to **Claim 16**, Anderson teaches the method of claim 12, wherein the exception task instructs an automated process to perform a task to resolve the exception (Anderson, col. 7 lines 14-20 and see section "Sequential repair of character recognition errors").

15. As to **Claim 17**, Anderson teaches the method of claim 12, further comprising: determining if additional information is required to validate a data element (Anderson, col. 7 lines 5-43, col. 33 lines 8-22); and generating an exception task to obtain the additional information (Anderson, col. 6 lines 56-63).

16. As to **Claim 18**, Anderson teaches a computer-readable medium incorporating instructions for routing and processing insurance related data (Anderson, Abstract and col. 8 lines 44-52), comprising: one or more instructions for receiving insurance application-related documents from external sources (Anderson, col. 3 lines 34-56), one or more instructions for storing the documents electronically in a raw data database (Anderson, col. 3 line 63 to col. 4 line 19); one or more instructions for converting, by a rules engine, the documents into at least one data element having a common format (Anderson, Fig. 4A steps 602-606); one or more instructions for determining whether each of the at least one data element has been fully validated as clean data (Anderson, col. 3 lines 24-33); one or more instructions for storing clean data in an operational database for use in application processing (Anderson, col. 3 lines 24-33); one or more instructions for generating an exception task if it is determined that at least one data element is not clean (Anderson, col. 6 lines 56-63); and one or more instructions for receiving a resolution to the exception task, thereby enabling validation of the at least one data element (Anderson, col. 7 lines 2-13).

17. As to **Claim 19**, Anderson teaches a computer-readable medium incorporating instructions for routing and processing insurance related data (Anderson, Abstract and col. 8 lines 44-52), comprising: one or more instructions for receiving insurance application-related documents from external sources (Anderson, col. 3 lines 34-56), one or more instructions for storing the documents electronically in a raw data database (Anderson, col. 3 line 63 to col. 4 line 19); one or more instructions for converting, by a

rules engine, the documents into at least one data element having a common format (Anderson, Fig. 4A steps 602-606); one or more instructions for determining whether each of the at least one data element has been fully validated as clean data (Anderson, col. 3 lines 24-33); one or more instructions for storing clean data in an operational database for use in application processing (Anderson, col. 3 lines 24-33); one or more instructions for monitoring clean data in the operational database and rules engine outputs (Anderson, col. 11 lines 59-68), one or more instructions for generating workflow tasks to enable case progression through the system, the tasks based upon said clean data and rules engine outputs (Anderson, Fig. 4A), one or more instructions for receiving responses to said workflow tasks (Anderson, col. 12 lines 1-11), and one or more instructions for determining case progression based upon said responses (Anderson, col. 12 lines 17-49 and Fig. 4B).

18. As to **Claim 20**, Anderson teaches the system of claim 19, further comprising: one or more instructions for generating an exception task if it is determined that at least one data element is not clean (Anderson, col. 6 lines 56-63); and one or more instructions for receiving a resolution to the exception task, thereby enabling validation of the at least one data element (Anderson, col. 7 lines 2-13).

19. Claims 2, 10 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson et al. (US 5,235,654) in view of in view of Scanlon (US 5,850,480) in further view of Applicant Admitted Prior Art (AAPA).

20. As to **Claims 2 and 13**, the combination of Anderson and Scanlon does not specifically disclose that the common format is extensible Markup Language. However, it is well known to those of ordinary skill in the art, that, the coded data in the application program storage database Anderson discloses (Anderson, Fig. 1R element 35) can be structured using any number of general-purpose database storage methodologies, including a XML markup language. Applicant is failed to adequately traverse Examiner's taking of official notice as required by MPEP 2144.03(C) and the said official notice will be taken as Applicant Admitted Prior Art. Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to include storing the data elements and attributes inside an XML document, as is well known to do, in order to organize the folders, tables, fields, and retrieved data elements of Anderson's invention (Anderson, col. 35 line 65 to col. 36 line 28), since so doing could be performed readily and easily by any person of ordinary skill in the art, with neither undue experimentation, nor risk of unexpected results.

21. As to **Claim 10**, Anderson teaches a system for routing and processing insurance related data (Anderson, Abstract and col. 8 lines 44-52), the system comprising: a raw data database electronically storing insurance application related documents (Anderson, col. 3 line 63 to col. 4 line 19, the Examiner takes the position that the master machine generated data structure is equivalent to the raw data database); a rules engine that converts the documents into at least one data element having a common format (Anderson, Fig. 4A steps 602-606); the clean data is stored in

an operational database for use in application processing (Anderson, col. 3 lines 24-33); a state machine that monitors clean data in the operational database and rules engine outputs (Anderson, col. 11 lines 59-68), wherein the state machine generates workflow tasks to enable case progression through the system, the tasks based upon said clean data and rules engine outputs (Anderson, Fig. 4A), wherein the state machine receives responses to said workflow tasks (Anderson, col. 12 lines 1-11), and wherein the state machine determines case progression based upon said responses (Anderson, col. 12 lines 17-49 and Fig. 4B); and wherein the rules engine generates an exception task if it is determined that one data element of the at least one data element that is not clean, the exception task associated exclusively to the one data element so as to process the one data element as an individual data element (Anderson, col. 6 lines 56-63, col. 27 lines 3-8); and the rules engine receives a resolution to the exception task, upon the performance of the determined process, thereby enabling validation of the at least one data element (Anderson, col. 7 lines 2-13).

Anderson does not specifically disclose the rules engine determining whether each of the at least one data element has been fully validated as clean data including; determining that syntax is correct; determining that required information is present; and determining that formatting is proper. Scanlon does teach the rules engine determining whether each of the at least one data element has been fully validated as clean data (col. 31 lines 42-48 and col. 33 lines 16-31) including; determining that syntax is correct (col. 25 lines 57-64); and determining that formatting is proper (col. 3 lines 60-67, col.

25 lines 57-64). It would have been obvious to one of ordinary skill in the art at the time of the invention to have included fully validating each data element as clean data for the motivation for OCR error correction (Scanlon, Abstract).

The combination of Anderson and Scanlon does not specifically disclose wherein such validation including determining that required information is present. However, the Examiner takes official notice that it is well known in the art to determine whether required information is present. For example, most forms such as contact information will not be entered into a system until all the required information is present in order to submit said contact information into the system. It would have been obvious to one of ordinary skill in the art at the time of the invention to include determine whether required information is present within the disclosure of Anderson and Scanlon for the motivation for completing forms to be filled out.

***Response to Arguments***

3. Applicant's arguments filed 01/05/2011 have been fully considered but they are not persuasive.

4. Applicant alleges the combination of Anderson and Scanlon does not teach:

... the rules engine generates an exception task constituted by the rules engine determining a process that is to be performed on one data element of the at least one data element that is not clean, **the exception task associated exclusively to the one data element so as to process the one data element as an individual data element;**

(emphasis added)

Examiner respectfully disagrees. Using the broadest reasonable interpretation in light of the supporting disclosure, Anderson teaches of creating an error task to at least one character (reads on, "exception task associated exclusively to at least one data element") so as to process the one character as an individual character (reads on, "the one data element as an individual data element"). An example of the supporting disclosure can be found at col. 27 of Anderson:

Still another application, and one used in the example herein, is common English given names or first names. The MGDS 50B is input to the artificial intelligence error correction processor 28, and the first name field 16" contains the letters "John" which is the character image 18. The output character string 42 of Ja\*n" from the character recognition processor 26, will be processed in the error correction processor 28 using lexical analysis. The corresponding second guess character "o" for the second character in the string 42 will also be tested using a lexical analysis to test "Jo\*n." The lexical analysis example is of given names having four letters with the first letter being "J" and the last letter being "n." A lexical analysis will draw upon a list of candidate names such as "Joel," "Jack," "John," "Jake," "Jane," "Jean," "Jill," "Joan," "Judy," and "June." The example of the lexical analysis performed by the artificial intelligence error correction processor 28, requires that the input MGDS message 50B supply some information in connection with the field, to enable the first repair to take place. The information supplied is the character string from the character data buffer B of the string 42 "Ja\*n," and the second guess character for the second character position, namely "o." The artificial intelligence error correction processor 28 will determine from its lexical analysis that the string "Joan" has a 50 percent certainty and the string "John" also has a 50 percent certainty.



***Conclusion***

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SIND PHONGSVIRAJATI whose telephone number is (571) 270-5398. The examiner can normally be reached on Monday - Thursday 8:00am-5:00pm (ET).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry O'Connor can be reached on (571) 272-6787. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or (571) 272-1000.

/S. P./

Examiner, Art Unit 3686

25 March 2011

/Gerald J. O'Connor/  
Supervisory Patent Examiner  
Group Art Unit 3686